circumstances: one was poisoned; the other fell into a pleasant sleep. In one case $\frac{1}{100}$ gr. was followed by sleep, while gr. $\frac{1}{50}$ produced delirium. In another, gr. $\frac{1}{100}$ produced delirium; and a larger dose, $\frac{1}{80}$ gr., was followed by sleep.

The authors consider hyoscine extremely unreliable as a hypnotic, and that it should not be used in general practice, except in cases in which other hypnotics have failed. M. PRINCE.

The Ætiology and Treatment of Migraine. By PROF. A. EULENBURG. Reprint from *Wiener Med. Presse*, 1887.

The author discusses the various theories that have been propounded of late years regarding the ætiology of migraine; he is not thoroughly pleased with any one explanation, least of all with the *reflex* theories. He grants that there may be a kinship between epilepsy and migraine, but granting this, the gain is not a great one until we know more about epilepsy. The author is of the opinion that it will be best to regard hemicrania as a vasomotor affection of the sympathetic nervous system, and to this we believe the majority of authors will at present agree. The remarks on the ætiology of the single attack are of greater interest. The attack is brought on by sudden variations in the endocranial blood-supply, the dilatation or contraction of the blood-vessels of the cerebral membranes producing irritation of the trigeminal filaments in the pia and dura mater. Those individuals would therefore be most likely to suffer from migraine who, by reason of some congenital defect, were either subject to sudden changes in the cerebral blood-supply, or had an unusually irritable trigeminal nerve, or were subject to both conditions. To prove this theory, Eulenburg has hit upon the ingenious theory of measuring the resistance of the two sides of the head, and he finds that, as a rule, the resistance is greater on the side of the migraine, particularly in the spastic form of migraine. Diminution of blood-supply accounts for increased resistance. (All this is in such striking accord with the theory here laid down that we are curious to know whether, and hope that, these facts and conclusions will receive further substantiation. Electrical resistance is chiefly a matter of the skin; the question arises: Does pallor of the skin imply anæmia of the membranes; redness of the skin, hyperæmia of the membranes?)

The remarks on treatment have reference to recent suggestions. Massage—tapotement, effleurage, and more specially the use of the percuteur—is viewed with favor for the cure of a single attack. In the way of constitutional treatment, Eulenburg advises following out the principles laid down by Oertel, more specially in cases in which there is some marked circulatory disturbance. The writer also urges the use of salicylate of soda and antipyrin, the latter in fifteen-grain doses, to be repeated after an hour in the initial stage of an attack. (The present writer has tried antipyrin in a few cases of migraine and in typical trigeminal neuralgia, but for the

present he prefers caffeine, cann. ind. and iron, and ergot or nitrite of amyl, according to the nature of the attack.) Prof. Eulenburg has a good word to say also for static electricity, and mentions one case in which the application of the negative head-douche cut short an attack of hemicrania. B. S.

The Value of Indian Hemp in the Treatment of a Certain Type of Headache. By STEPHEN MACKENZIE, M.D. (*British Medical Journal*, January 15th, 1887.)

The headache described by the writer of this article is a very common one, but at times very difficult to treat. It is usually of a dull, continuous or subcontinuous character, attended sometimes with paroxysmal exacerbations. What is especially characteristic of it is its constancy. The headache may in some cases become aggravated as the day advances, but sometimes the opposite condition obtains, and it is worse at the early part of the day. Its situation varies; it may be frontal, temporal, or occipital. Usually, however, it is diffused. There is, as a rule, no local soreness or tenderness.

Nausea may be present; vomiting is usually absent. As a rule, there are none of the ocular phenomena characteristic of migraine, and the headache is not often hemicranial. Constipation is present in a certain number of cases, but removal of the constipation does not cure the headache. In some cases it is associated with disorders of digestion, but the same remark applies to these as to constipation. Headaches of this type may last for weeks, months, or even years. They are most common in young adults, and in persons in the middle period of life.

The nature of these headaches is obscure. They are not due to peripheral irritation or anæmia, but to some dyscrasia or diathesis.

It is in relief of these continuous or chronic headaches that Indian hemp is of the greatest service. The best results are obtained from the use of the extract. One-third of a grain, in pill form, is given night and morning for a week. If no improvement results, the drug can be gradually increased until two grains at night and one and a half grains in the morning are reached.

The important points in the treatment are the gradually increasing doses and the steady perseverance in the use of the drug.

The length of time over which treatment extends varies in different cases, usually several weeks, but rebellious cases require several months. As the malady recedes, the dose should be reduced, and it is advisable to continue the administration of the remedy for a week or two after the headache has disappeared. SANDERSON.